

BODY PERCUSSION

The main feature of the Body percussion method is the high number of neuro-motor links and the high degree of psycho-physical gratification. In a very brief and clear way we will try and clarify all these characteristics. We Should first of all keep in mind the high value of the pure and simple pleasure to play that is intrinsic in the activity itself.

From a musical viewpoint

- 1) The movements are finalized, through different impacts of the hands on the body, to simple and nice to listen rhythms.
- 2) In some cases we find out complex Polyrhythms carried out through the coordination of superior and inferior limbs and accompanied by verbal sounding;
- 3) The high level of coordination depends on a bodily rhythmical interiorization, that does not give any chance to rhythmical uncertainties or doubts;
- 4) From a creative viewpoint it induces percussionists to the constant research of different body sounding, sometimes depending on very little changes, as for example a different limb inclination.

From a Neuro-Motor and Mnemonic view point

- 1) Independently from the degree of difficulty to face our brain must coordinate the control skill of its left and right sections;
- 2) The types of memories that are activated are different ; short term memory, long term memory, kinesthetic memory, procedural memory, auditory memory, sequential access memory, direct access memory, synesthetic memory, spacial memory, visual memory, perspective memory. They all contribute to create a deep and powerful sensory synergy;

- 3) If to the percussion we add a directional movement (forward, backward, right, left) the degree of coordination will strongly increase, because our brain system uses a lot of energy in the handling of direction skills. By using direction instructions and rhythm at a specific sequence/speed, learning will result to be more deeply rooted, anchored and long lasting.
- 4) The pleasure that the activity provokes produces dopamine, thus creating dopaminergic circuits which will – in their turn - make the activity satisfactory and fulfilling with a sort of direct exigency/feeling to reiteration (typical reaction of dopamine).
- 5) The considerable and essential involvement of the auditory organ will allow the person doing the activity to remember patterns of any kind. But the most interesting aspect will be the implication of the Vestibular system. This latter is deputed to the direct control of left and right crisscrosses thus necessarily involving otoliths in the balance management.
- 6) The Body Percussion is always supported by a clear vocalization, that sometimes can be heard during the performance, and in other cases, by a sub-vocalization that allows a more solid, subtle and lasting connection with the rhythm. The vocalization and sub-vocalization will be exploited by using numbers and jingles up to the more complex and professional use of the Indian 'TALA'.
- 7) The role of sequences passes, with no solution of continuity and control, from the auditory memory to the visual one to finally create cognitive cohesions (connections) and interferences according to the performer learning structures and personal ways. In this way cohesions and interferences will give a contribute to the development of neuronal plasticity in him/her, this to be considered at the very base of any learning.

- 8) The body Percussion implies a constant capacity to adapt, so learning through it will be structured upon constant change and adaptation that will train the brain to restructure the new data on the base of the old ones, by using the two powerful sub-elements of learning: Similarity and Analogy.
- 9) Automatically our learning system will look for similarities with what has been already learnt and when these are considered scarce or not solid enough, the research is automatically projected into the possibility of creating analogies between what has been already learnt and the new information. The Important consideration of these two learning schemes is that the former (Similarity) is processed on a sensory base, the latter (Analogy) is processed on a cognitive base. So in both cases The Body Percussion will favor and reinforce the learning growth, even on a multi-disciplinary backfill.
- 10) Obviously the main characteristic of the Body Percussion Method is the constant beating of the person's body. From a neuronal transmission viewpoint it is interesting to know that the body impact will start the functioning of the Pacini corpuscle (sensory receptor, whose role is to transmit vibration and pressure stimuli to the brain 250-300 Hz). In case the pressure was not sufficient enough, the Merkel corpuscle would then work (20-to 60 Hz). From a learning viewpoint this means that the information will not necessarily be filtered by a cognitive system and will arrive to the brain in a direct and clear way.